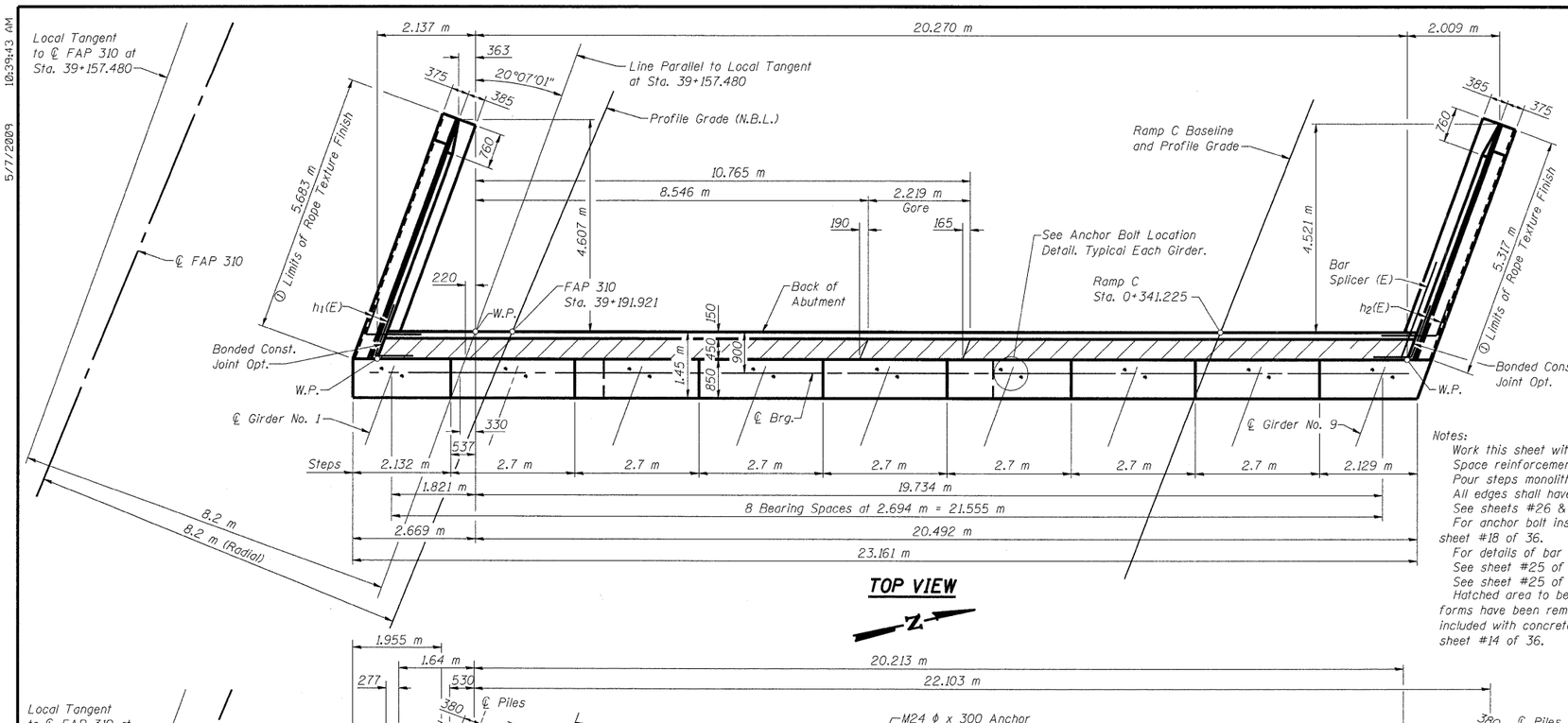
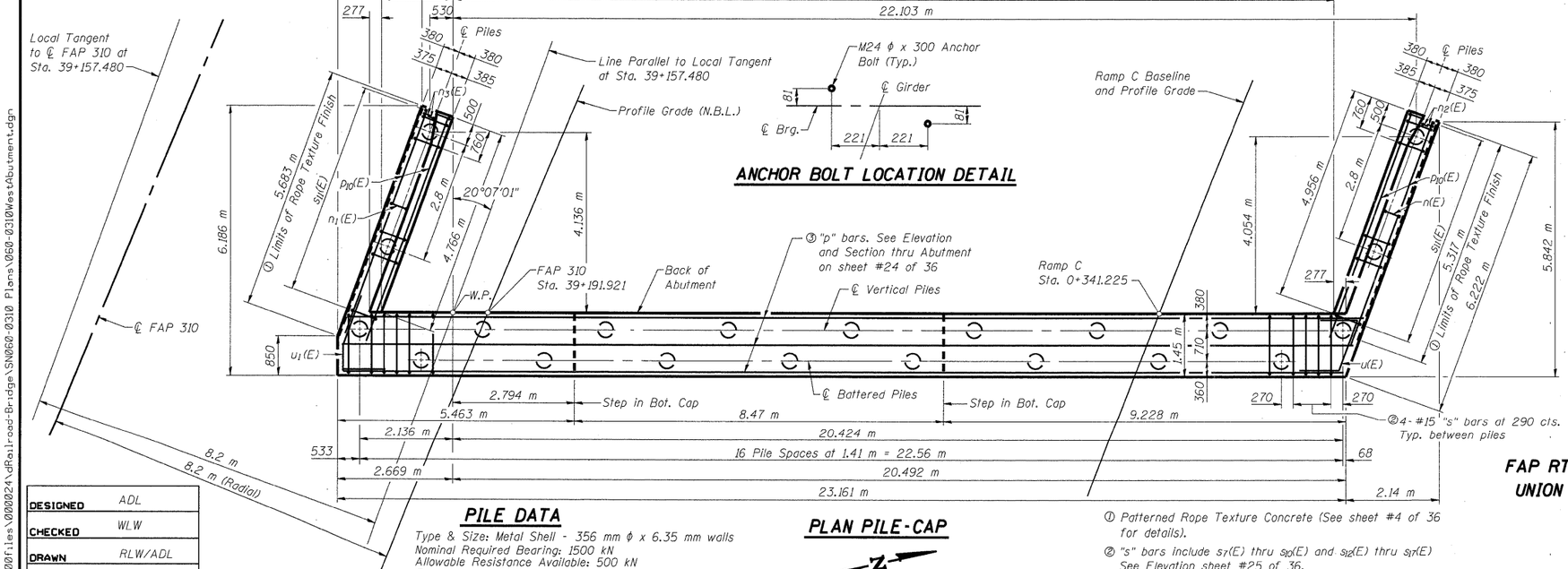
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I. F.A.P. 310	*	MADISON	149	55
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 24
36 SHEETS

Contract #76634
* 60-15VB-1 & 2



TOP VIEW



ANCHOR BOLT LOCATION DETAIL

PILE DATA

Type & Size: Metal Shell - 356 mm ϕ x 6.35 mm walls
Nominal Required Bearing: 1500 kN
Allowable Resistance Available: 500 kN
Est. Length: 22.0 m
No. Required: 21

PLAN PILE-CAP

① Patterned Rope Texture Concrete (See sheet #4 of 36 for details).
② "s" bars include $s_7(E)$ thru $s_{10}(E)$ and $s_{12}(E)$ thru $s_{17}(E)$ See Elevation sheet #25 of 36.
③ "p" bars include $p_1(E)$, $p_4(E)$, $p_8(E)$, and $p_{11}(E)$ thru $p_{17}(E)$.

Notes:
Work this sheet with sheets #25, 26 & 27 of 36.
Space reinforcement in cap to miss anchor bolts.
Pour steps monolithically with cap.
All edges shall have standard 20 mm chamfer.
See sheets #26 & 27 of 36 for Wing Wall Details.
For anchor bolt installation see details on sheet #18 of 36.
For details of bar splices, see sheet #33 of 36.
See sheet #25 of 36 for bar details.
See sheet #25 of 36 for Elevation of Abutment.
Hatched area to be poured after superstructure forms have been removed. Quantity of concrete included with concrete superstructure on sheet #14 of 36.

WEST ABUTMENT BILL OF MATERIAL

Bar	No.	Size	Length (m)	Shape
h(E)	14	#15	11.52	
$h_1(E)$	10	#15	2.03	
$h_2(E)$	10	#15	2.03	
$h_3(E)$	11	#15	5.24	
$h_4(E)$	7	#15	5.25	
$h_5(E)$	12	#15	5.60	
$h_6(E)$	8	#15	5.61	
$h_7(E)$	8	#20	11.60	
$n_1(E)$	16	#20	3.58	
$n_3(E)$	6	#20	1.80	
$n_7(E)$	16	#20	4.48	
$n_8(E)$	6	#20	2.25	
$p_1(E)$	3	#25	9.98	
$p_4(E)$	12	#15	11.85	
$p_8(E)$	21	#25	4.15	
$p_{10}(E)$	12	#25	5.46	
$p_{11}(E)$	3	#15	6.85	
$p_{12}(E)$	1	#25	9.14	
$p_{13}(E)$	1	#25	9.38	
$p_{14}(E)$	1	#25	9.61	
$p_{15}(E)$	2	#25	5.30	
$p_{16}(E)$	1	#25	5.15	
$p_{17}(E)$	3	#25	4.10	
$s_7(E)$	6	#15	5.86	
$s_8(E)$	16	#15	5.56	
$s_9(E)$	2	#15	5.26	
$s_{10}(E)$	6	#15	4.98	
$s_{11}(E)$	34	#15	2.90	
$s_{12}(E)$	5	#15	5.88	
$s_{13}(E)$	7	#15	5.30	
$s_{14}(E)$	3	#15	5.08	
$s_{15}(E)$	5	#15	5.90	
$s_{16}(E)$	7	#15	5.60	
$s_{17}(E)$	8	#15	5.28	
u(E)	5	#20	3.39	
$u_1(E)$	5	#20	2.69	
v(E)	150	#15	1.70	
$v_7(E)$	75	#15	1.10	
$v_8(E)$	75	#15	0.68	
$v_9(E)$	16	#20	2.14	
$v_{10}(E)$	16	#20	2.09	
$v_{11}(E)$	19	#20	2.09	
$v_{12}(E)$	3	#20	2.10	
$v_{13}(E)$	3	#20	2.05	
$v_{14}(E)$	19	#20	2.04	
Concrete Structures			m^3	72.9
Reinforcement Bars (Epoxy Coated)			kg	4,190
Bar Splicers			each	75
Structure Excavation			m^3	158
Furnishing Metal Pile Shell 356mmX6.35mm			m	462.0
Driving Piles			m	462.0
Concrete Sealer			m^2	75
Form Liner Textured Surface			m^2	31
Concrete Encasement			m^3	6.8

DESIGNED	ADL
CHECKED	WLW
DRAWN	RLW/ADL
CHECKED	WLW

WEST ABUTMENT
FAP RTE. 310 (IL RTE. 255) NB & RAMP C OVER UNION PACIFIC & KANSAS CITY SOUTHERN R.R.
SECTION 60-15VB-1 & 2
MADISON COUNTY
STATION 39+160.297
STRUCTURE NUMBER 060-0310

Klingner & Assoc., P.C.

5/7/2009 10:39:43 AM
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